IN THE

Supreme Court of the United States

OCTOBER TERM, 1925



CONCRETE APPLIANCES COMPANY AND WILLIAM
H. INSLEY,

Petitioners,

VS.

JOHN E. GOMERY, JOHN C. SCHWARTZ, MICHAEL J. O'MEARA, AND CONCRETE CONSTRUCTION COMPANY,

Respondents.

PETITION FOR WRIT OF CERTIORARI AND BRIEF IN IN SUPPORT OF PETITION.

ARTHUR M. HOOD,
STEPHEN J. COX,
CYRUS N. ANDERSON,
Counsel for Petitioners.

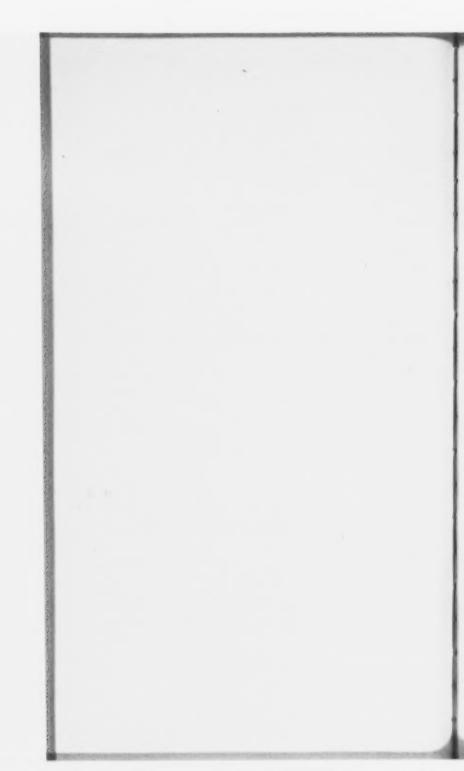
E. A/HARDIN PRINT, INDIANAPOLIS, IND.

243845°



INDEX.

	age
Petition for Writ of Certiorari	. 1
Brief in Support of Petition	
Argument	. 12
Appendix A-Opinion Circuit Court of Appeals, Sixth	
Circuit	22
Opinion on Rehearing Petition	37
Appendix B-Opinion Circuit Court of Appeals, Third	1
Circuit	40
Appendix C-Decree Circuit Court of Appeals, Third	1
Circuit	. 54
Appendix D-Modified Decree Circuit Court of Appeals	
Third Circuit	. 56
Notice of Submission	. 58



IN THE

Supreme Court of the United States

OCTOBER TERM, 1923.

CONCRETE APPLIANCES COMPANY AND WILLIAM H. INSLEY,

Petitioners.

28.

JOHN E. GOMERY, JOHN C. SCHWARTZ, MICHAEL J. O'MEARA, AND CONCRETE CONSTRUCTION COMPANY,

Respondents.

No. ----

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF AP-PEALS FOR THE THIRD CIRCUIT.

To the Honorable the Supreme Court of the United States:

The petitioners respectfully represent to this Honorable Court as follows:

This is a suit brought for the infringement of the Callahan patent Number 948,719 of February 8, 1910. The Circuit Court of Appeals for the Sixth Circuit in 1920 held the patent valid as to certain claims (262 Fed. Rep. 958), and the Circuit Court of Appeals for the Third Circuit has now held the patent invalid as to the same claims, and this petition is brought to have this court determine this conflict.

The Court of Appeals for the Sixth Circuit decided that the patent was for a new and useful and patentable invention, and the Court of Appeals for the Third Circuit has since held that there is no patentable novelty or invention disclosed therein. As a result of this conflict, a large number of users and several manufacturers in different parts of the United States are unable to determine whether the patent is valid or invalid, and can only be relieved of this dilemna by an authoritative decision of this court. In the Sixth Judicial Circuit, the patent is valid, and the owners thereof are entitled to relief against infringement, whereas in the Third Circuit the patent is invalid and the owners thereof can have no relief. In the other circuits of the United States the question is open and undetermined.

The facts are as follows:

- 1. This suit, alleging infringement of claims 1, 2, 5 and 13 of the Callahan patent No. 948,719 of February 8, 1910 for "Material Transferring Apparatus" (Rec., Vol. III, p. 128), was brought by the petitioners, Concrete Appliances Company and Wm. H. Insley, the patent owner and licensee, respectively, in the District Court of the United States for the Eastern District of Pennsylvania, against the respondents John E. Gomery, John C. Schwartz, Michael J. O'Meara and Concrete Construction Company, by Bill of Complaint filed July 19, 1920 (R., Vol. I, p. 10).
- 2. The said United States District Court, in a final decree entered November 20, 1922, dismissed the Bill of Complaint (R., Vol. III, p. 190), pursuant to opinions filed June 13, October 31st and November 6th, 1922 (R., Vol.

III, pp. 177 to 190, also 284 Fed. Rep. 518) in which it was held that the defendant's apparatus did not infringe.

- The petitioners thereupon appealed to the United States Circuit Court of Appeals for the Third Circuit, which appeal came on for hearing before Buffington, Wooley and Davis, Circuit Judges, and the Court, on July 24, 1923, filed an opinion and order finding the patent invalid and affirming the decree of the said District Court as modified. Thereupon and on August 1st, 1923, the petitioners requested the Court to reconsider the questions relating to the matter of costs, and this request was granted and the issuance of the mandate withheld. The Court held the matter under consideration until January 23, 1924. when it made an order vacating the order of July 24, 1923. The Court then, on January 31, 1924, made an order modifying and affirming the decree, directing that the cause be remanded to the District Court and directing "that the said Court modify its decree by adjudging the claims in controversy invalid", and further providing that "as thus modified the decree is affirmed, with costs.". The said opinion of the Court of Appeals of July 24, 1923, orders of July 24, 1923 and January 23, 1924, and decree of January 31, 1924 are certified herewith, and are printed in the appendix to the accompanying brief and marked "B", "C" and "D" respectively.
- 4. Prior to the decision in this suit, the said Callahan patent has been held valid as to the same claims involved in this suit (1, 2, 5 and 13) by the Circuit Court of Appeals for the Sixth Circuit (262 Fed. Rep. 958, Warrington, Knappen & Denison, Circuit Judges), in a suit brought by these petitioners, by Bill filed August 7, 1916, against Dietrich Meinken, Roy C. Owens and George B. Curd, in the

District Court of the United States for the Southern District of Ohio, Western Division, in opinions filed January 6, 1920, and, on petition for rehearing, March 2, 1920. The said opinions of the Circuit Court of Appeals for the Sixth Circuit are printed in the appendix to the accompanying brief and marked "A". In that suit the said District Court held the said claims of the patent invalid, and this petitioner appealed to the Circuit Court of Appeals for the Sixth Circuit, which resulted in the decision sustaining the validity of the said claims of the patent. The opinion of the District Court is found at pages 43 to 46 of the record in the Circuit Court of Appeals for the Sixth Circuit which is an Exhibit in the present suit and is transmitted as such with the record of this suit.

5. The decision of the Circuit Court of Appeals of the Third Circuit does not sustain the District Court on the question of infringement, but says:

"The Court below held the patent was not infringed; we go a step further and hold Callahan, so far as the claims here involved are concerned, had no such patent claims to infringe." (Opinion last par.)

It is thought that the lower Court placed an extremely narrow construction upon the claims of the patent in suit, and then held the said claims not infringed, in order that the plaintiff might be required to assume the burden of the appeal and because he considered the patent invalid but did not wish to take issue with the Court of Appeals for the Sixth Circuit. That he regarded the patent as invalid unless "limited to the specific special construction which the patentee devised" is expressly stated in his opinion. (Rec., Vol. III, p. 182). If, therefore, the decision of the

Circuit Court of Appeals for the Sixth Circuit holding the patent valid is correct, the patent must be construed with reasonable breadth, and as thus construed must be infringed.

6. That the decisions of the Sixth and Third Circuit Courts of Appeals are in conflict is shown by the language of the two opinions. Thus the Circuit Court of Appeals for the Sixth Circuit, referring to the same claims which were before the Circuit Court of Appeals for the Third Circuit, said (262, Fed. Rep. 958, 965):

"On the other hand, we recall no instance of combinations of old elements which has been held to produce 'a new result' in a patentable sense and which better deserves that commendation than does Callahan's. The quasi automatic elevation and distribution of wet concrete under the varying conditions of progressive building and by a single apparatus was an entire novelty. No one had tried to do it; apparently, no one had thought of it; it was useful in a very high degree; and when we find a new result in this complete and extreme sense accomplished by a confessedly new combinationthough of known means-we think both the purpose of the patent law and the rightful application of the decisions thereunder require that it should be awarded the merit of invention." (All italics ours.)

The Circuit Court of Appeals for the Third Circuit, referring to the same claims, and to the same combination of old elements, said (opinion next to last par.):

"In fact, we are unable to find any element of novelty either in the separate elements Callahan used or in the unification of such elements in the apparatus he suggested." The conflict therefore arises from the holding of the Sixth Circuit Court of Appeals that Callahan's apparatus was not for a mere aggregation of old parts but for a patentable combination, and the holding of the Circuit Court of Appeals for the Third Circuit that there was nothing patentable in that combination.

7. The records before the two Court of Appeals in the Sixth and Third Circuits are substantially the same, so far as they relate to the question of aggregation or invention. The record in the Sixth Circuit Court of Appeals contains fifteen prior United States and British patents, granted at various times between the years 1864 and 1907, and the record in the present suit contains thirty-seven United States and British Letters Patent granted during the same period, including thirteen of the fifteen patents found in the first record. These patents are believed to be merely cumulative, and to add no new element of importance to the elements shown by the patents of the earlier record, which were fully considered by the Court of Appeals for the Sixth Circuit when it rendered its decision sustaining the validity of the patent. The present record contains much evidence relating to prior uses which was not before the Court in the Sixth Circuit, but these prior uses are substantially uses of the apparatus shown in the prior patents which were considered by that Court, and were not uses of the complete apparatus of the claims, nor of parts having the same peculiar structural features of some of the parts specified in the combinations of such claims. The conflict is therefore one of decisions based upon substantially the same facts, or at least facts which have substantially the same relation to the questions decided. A reading of the last paragraph but one of the opinion of the Circuit Court of Appeals for the Third Circuit, and a comparison of the summary of parts found in the prior art with claim 5 of the patent will show that two elements at least were lacking, viz: the "boom carrying the conduit" or so-called "boom spout", and the vertical adjustability of the bin or "means for receiving plastic material." These two elements being absent, the combination cannot be present in the prior art.

- The subject matter of the patent in suit is what is commonly known as a gravity concrete distributing plant, and such plants are very extensively used in the construction of buildings throughout the United States. It comprises a tower in which the concrete is elevated to the proper height, as the building rises, a vertically adjustable receptacle on the tower, which also rises with the building, and conduits or "spouting" provided with truss work which gives it the appearance of a boom, and enables the builder to distribute concrete to all parts of the building laterally and vertically, without rebuilding or rearranging the distributing plant. These plants are a familiar sight in every section of the country. It is therefore of the utmost importance not only to the parties to this suit but to the building industry and the public at large that an authoritative ruling of this Court on the question of the validity of the Callahan patent shall be made, and the doubt and uncertainty which now exists in seven of the nine Judicial Circuits of the United States concerning its validity shall be removed.
- 9. The petitioners believe and respectfully represent that the decision of the Circuit Court of Appeals for the Sixth Circuit holding the Callahan patent to be valid was right, just and correct in law, and that the contrary deci-

sion of the Circuit Court of Appeals for the Third Circuit in this case was erroneous.

WHEREFORE the petitioners respectfully pray:

That a writ of certiorari may issue out and under the seal of this Honorable Court, directed to the United States Circuit Court of Appeals for the Third Circuit, commanding said Court to certify and send to this Court a full and complete transcript of the record of all of the proceedings in this cause, to the end that said cause may be reviewed and determined by this Court, as provided by law; and that the petitioners may have such other and further relief as to this Court may seem appropriate and in conformity with law.

ARTHUR M. HOOD,

STEPHEN J. COX,

CYRUS N. ANDERSON, Counsel for Petitioners.

We hereby certify that we are of counsel for petitioners herein, Concrete Appliance Company and William H. Insley; that in accordance with the request of said petitioners the foregoing petition has been prepared; and that the allegations contained in said petition are true, to the best of our knowledge and belief; and that said petition is, in our opinion, well founded in law and in fact, and should be granted.

ARTHUR M. HOOD,

STEPHEN J. COX,

CYRUS N. ANDERSON,

Counsel for Petitioners.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1923.

CONCRETE APPLIANCES COMPANY AND WILLIAM H. INSLEY,	2
Petitioners,	
vs.	No
JOHN E. GOMERY, JOHN C. SCHWARTZ,	}
MICHAEL J. O'MEARA and CONCRETE	
CONSTRUCTION COMPANY,	
Respondents.	

BRIEF IN SUPPORT OF PETITION.

The grounds upon which the writ of certiorari is asked are briefly as follows:

1. The decision of the Court of Appeals for the Third Circuit, here sought to be reviewed, is in conflict with the previous decision of the Circuit Court of Appeals of the Sixth Circuit, in the case of Concrete Appliances Company and William H. Insley (the petitioners), v. Dietrich Meinken, Roy C. Owens, and George B. Curd, in which it was held the Callahan patent here in suit valid. (262 Fed. Rep. 958.)

The issues upon which the case was decided on full hearing, in the Sixth Circuit in favor of the patent, were in the present suit decided in the Third Circuit adversely to the patent. In each case, there was such a presentation of the state of the art that the conflict of decisions cannot be attributed to a substantially different state of facts, but is clearly attributable to a different interpretation of the law applicable to the facts and a different interpretation of the facts and their import. The two courts have therefore directly disagreed on substantial issues.

The result is that the patent is valid in the Sixth Circuit and invalid in the Third Circuit. This situation should be corrected, and more particularly since the case is of great importance, and effects directly or indirectly manufacturers of gravity concrete distributing apparatus, or "spouting plants" throughout the United States and the entire building industry, and the conflict of decisions has caused a condition of confusion in the various circuits.

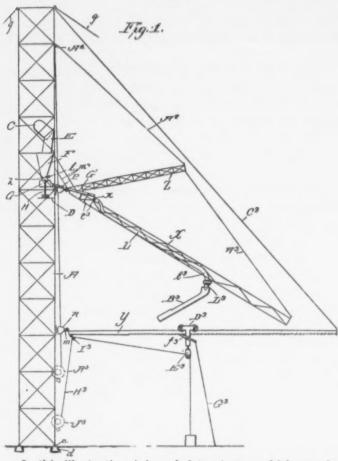
2. The Circuit Court of Appeals for the Sixth Circuit held that even though the improvements defined by the claims of the patent in suit be regarded as a combination of old elements it was patentable invention to bring these elements together in such a way as to form the plant covered thereby, whereas the Circuit Court of Appeals for the Third Circuit has declared that there was nothing new or patentable in this combination. In both Courts the particular entire combination of elements was not found in the prior act. This is apparent from a reading of the opinions. It is further apparent from the records that certain of these elements were not found in the particular form in which they appear in the patent. The Court in the Third

Circuit however, held that this combination was but a natural assemblage of parts, made to meet the conditions and serve the purposes which the patentee had in mind, whereas the Sixth Circuit Court of Appeals held that invention was required to bring these parts together into a unitary structure or plant. It is contended that the decision of the Sixth Circuit Court was correct and that the decision of the Third Circuit Court was erroneous.

ARGUMENT.

The Callahan patent in suit is for a contractor's plant, commonly known as a spouting plant, adapted to be used for the purpose of distributing concrete by gravity to all points laterally and vertically of a building under construction from a central concrete mixing point. The object is to enable the builder to bring all his concrete making materials to one point on the job, mix them there and then, by means of this gravity distributing plant to elevate them and chute them to any and all points throughout the entire growing structure, and without re-constructing or rearranging the various parts of the plant, so that once the concrete distributing plant is set up it will remain substantially intact and supply all parts of the building. the building is completed the concrete distributing plant is taken down and removed and may be set up and used in the same manner on another job, and so on. The construction and arrangement is such that the plant may be used on any and all ordinary buildings, and under any and all conditions, without alteration. In other words, the plant covered by the patent is in effect a contractor's tool or implement, universally usable on all usual building constructions. It may also be used without alteration in the construction of walls, bridges, viaducts and other works.

The following cut, which is a reproduction of Fig. 1 of the patent (R., V. III, p. 128), shows diagrammatically an embodiment of the improvements:



In this illustration A is a skeleton tower, which may be erected to the height of the building in the first instance or extended upward as the building rises by simply adding the interchangeable duplicate sections at the top of those originally placed.

C represents a common form of hoisting bucket, arranged to be raised to any desired point in the tower to

automatically dump the concrete—which is mixed at the base of the tower—into a hopper or receptacle represented at F.

G is a pan, bin or "receptacle" which receives and holds the mixed concrete, and from which the concrete is fed as desired, by means of a suitable gate, to the conduit chute or spout extending to all parts of the building.

The hopper F and pan G constitute the "receptacle" for the material, and are mounted in the tower in such a manner that they may be moved upwardly therein as the building rises so that they will always be elevated above the level of the concrete work and give the concrete a proper head so that it will flow by gravity to the points of application.

L is the conduit chute or spout through which the concrete flows from the adjustable receptacle in the tower to any and all parts of the building. In the illustration it consists of a pipe or conduit carried by a long arm or "boom" consisting of bars or rods and truss work. The conduit proper is inside this boom and connected therewith so that the two form in effect a unitary structure. The boom or arm is represented at X.

The combined boom and conduit or "boom spout" is vertically adjustable on the tower, so that, like the receptacle it can be raised higher and higher as the building grows. It is also mounted so that it can be swung sidewise through the greater part of a circle, and also so that it can be swung up or down.

The chute or conduit L has a swiveled end section B3 jointed thereto, and there may be as many of the sections L as the lateral dimensions of the building require. The boom chutes are commonly made 48 feet in length, and it will be seen that not more than two or three of them will

be needed to provide a radius sufficient to cover any ordinary building area.

The claim of the patent taken by the Court of Appeals for the Sixth Circuit as a typical definition of the improvements is claim 5, which reads:

"5. An apparatus for the purpose described, comprising a tower, a conduit, extending laterally therefrom, a suitably-supported, horizontally-movable boom carrying the conduit; said boom being adjustably connected with the tower and adapted to be arranged at various points in the height thereof, means for raising plastic material to the point desired in the height of the conduit, and means for receiving plastic material from the raising means and conducting same to the conduit; the said receiving and conducting means being adjustable in the direction of the height of the tower."

It will be seen that this claim is for an apparatus consisting of a combination of the following parts or elements.

- 1. A tower,
- 2. a conduit extending laterally therefrom,
- a suitably supported horizontally-movable boom carrying the conduit; said boom being adjustably connected with the tower and adapted to be arranged at various points in the height thereof,
- means for raising plastic material to the point desired in the height of the conduit (tower),
- means for receiving plastic material from the raising means and conducting it to the conduit; said receiving and conducting means being adjustable in the direction of the height of the tower.

In other words, it calls for an apparatus consisting of (1) a tower, (2) a conduit, (3) a swinging and vertically

adjustable boom carrying the conduit, (4) a hoisting bucket or the like, and (5) a vertically movable bin or receptacle communicating with the conduit.

The details of the illustrative embodiment of the improvement claimed are fully described and shown in the specifications of the patent, and need not be here described at length. The patent is not limited to such details of construction (Pat. p. 3, 11 69 to 77).

Concerning this apparatus the Court of Appeals for the Sixth Circuit said (262 Fed. Rep. 961):

> "It occurred to Callahan that he could construct a tower, or skeleton elevator shaft, which should originally extend, or which, by successive additions, should be made to extend well above the highest story of the proposed building; that he could attach to this tower, and make vertically adjustable thereon a receiving bin or hopper carrying a downwardly inclined and revolubly connected discharge chute, which could be swung about to reach various points on the next lower level to that where the receiving bin was fixed; that this receiving bin and its discharging apparatus could be temporarily fixed, as the building advanced, at positions on the tower suitably elevated above each successive story; that the mush concrete could be elevated inside the tower to these various fixed positions and there dumped into the receiving bin; and that, in this way the mush concrete could be delivered in an approximately automatic way throughout the successive floors or levels of a building, no matter how high. Upon this record, this general thought was wholly novel. It has proved to be of great commercial value."

The Court of Appeals for the Sixth Circuit further said (Id. p. 964):

"Callahan's conception, that this material could be thus treated so as to deliver it from the ground all about the successive several floors of a high building and with practically no manual labor, except that involved in the story by story adjustment of the apparatus, involved, we think, inventive thought of a high order, when accompanied as it was by the devising of suitable apparatus to carry out the thought, which apparatus substantially differed from anything which had ever been constructed for any purpose, although every element was old."

And again, in stating that the apparatus answered the test of the decisions of this Court, and the lower courts, and possessed the requisites of a patentable combination (Id. pp. 965-966):

"On the other hand, we recall no instance of combinations of old elements which has been held to produce 'a new result' in a patentable sense and which better deserves that commendation than does Callahan's. The quasi automatic elevation and distribution of wet concrete under the varying conditions of progressive building and by a single apparatus was an entire novelty. No one had tried to do it; apparently, no one had thought of it; it was useful in a very high degree; and when we find a new result in this complete and extreme sense accomplished by a confessedly new combination though of known means-we think both the purpose of the patent law and the rightful application of the decisions thereunder require that it should be awarded the merit of invention.

We have stated our conclusion that the device of the patent is not an aggregation, in the sense that it represents such a mere assembling of old elements as might have been made by the exercise of only ordinary skill. It is at least equally clear that the device is not an aggregation in the more technical sense of the word, but is rather a true combination. It is true that the use of the apparatus involves successive steps, and is at each of its stages under direct or indirect manual control; but in a fair sense the entire operation of elevating and distributing the concrete is a unitary thing. From the time it starts on its journey from the ground to the time it is deposited in the forms, its progress might well be automatic. There is clear distinction between this performance and that of the associated washing and wringing machines, discussed by the Supreme Court in Grinnell Co. v. Johnson Co., 247 U. S. 426, 38 Sup. Ct. 547, 62 L. Ed. 1196."

A pertinent statement in the specification of the patent (p. 3, 11. 60 et seq.) is the following:

"It will also be manifest that as a building is raised the booms and the appurtenances can be raised, and when the apparatus is in use the only manual labor necessary to the successful operation thereof is one man on the platform D, one man to manipulate the lines of the booms, and three men to supply and set materials and tamp walls, etc."

That the combination of parts in the manner specified produced a new article—a universally usable and adjustable gravity concrete distributing plant—and a new result seems indisputable. But the Court of Appeals for the Third Circuit held that this did not involve invention, but was the result of mere bringing together of old parts by the exercise of ordinary skill.

The Court of Appeals for the Third Circuit, however, did not base its decision on claim 5 of the patent, which the Court of Appeals for the Sixth Circuit regarded as the best definition of the invention. The decision in the Third Circuit appears to have considered only claim 1, which is the claim quoted in the opinion, and which is for an incom-

plete sub-combination. The Court of Appeals for the Third Circuit in this opinion, said:

"On his apparatus, Callahan was allowed the claims here in question, viz: 1, 2, 5 and 13, of which the first reads:

'An apparatus for the purpose described, comprising a tower, a suitably supported horizontally movable boom connected therewith, a conduit carried by the boom, means for raising plastic material to a suitable point in the height of the tower, and means for receiving plastic material from said raising means and conducting the same to said conduit.'

This is fairly illustrative of the elements of the other three claims. The elements of the quoted claim are first 'a tower'; second, 'a suitably supported horizontally movable boom connected therewith'; third, 'a conduit carried by the boom'; fourth, 'means for raising plastic material to a suitable point in the height of the tower', and fifth, 'means for receiving plastic material from said raising means and conducting the same to said conduit.'"

The elements of this claim are then compared with the prior art—but without considering the conduit "carried by the boom"—and the conclusion reached that the elements of this incomplete combination were found in the prior art.

It will be seen therefore that the Court in the Third Circuit, in comparing the apparatus of the patent with the prior art did not consider two of the most vital and important features of the apparatus, viz: (a) the combination boom conduit, which made the suspended extension of the gravity feeding devices to cover all building areas possible, and (b) and the vertical adjustability of the receptacle and the boom which enabled the plant to rise with the building to any desired height.

The first element is expressed in claim 1 but does not appear to have been taken into consideration, and the second element is not expressed in claim 1 at all, and also appears to have been overlooked by the Court in comparing claim 1 with claim 5.

The court says, speaking of the tower:

"There was of course nothing new in his element of his elevating tower. That was as old as the elevator art. Making it extensible from story to story involved no more invention than if he had built his tower complete at the start and allowed his building to build up to tower height instead of the tower to the building height."

But it is not the extensibility of the tower that is of such importance (the claims do not specify an extensible tower), but the vertical adjustability of the bin or receptacle and the boom conduit in the tower.

The court further says of the receptacle:

"A receptacle for storage at the top was a common practice in grain and coal devices and a boom to carry a chute or trough was common in the grain and concrete arts."

This is very true, but it does not touch upon the vital points which are that the conduit is actually carried by the boom, forming a new device known as a boom conduit or chute, and that the receptacle for storage is not at the top of the tower but is adjustable throughout the height of the tower to serve all levels of the building from the ground to the roof.

The evidence relating to prior uses of one or more elements of the combination need not be considered, since all of these elements are old in a general sense, and were treated as old by the Court of Appeals for the Sixth Circuit, and concededly the complete combination which is essential to the realization of the patented improvement is not found in any prior use device. Furthermore, the prior uses referred to in the decision of the Court of Appeals for the Third Circuit were of apparatus substantially the same as that of the prior patents found in the record in the Sixth Circuit; and since this apparatus lacks essential features of the patented combination no evidence that it was actually used can make it an anticipation of that combination.

CONCLUSION.

It is therefore respectfully submitted that the foregoing petition for a writ of certiorari should be granted.

ARTHUR M. HOOD,

STEPHEN J. Cox,

Cyrus N. Anderson, Counsel for Petitioners.

APPENDIX A.

No. 3241.

IN THE

UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SIXTH CIRCUIT.

CONCRETE APPLIANCES COMPANY, ET AL.,

Plaintiffs and Appellants, vs.

DIETRICH MEINKEN, ET AL.,

Defendants and Appellees.

Appeal from the Southern District of Ohio, Western Division.

SUBMITTED MARCH 5, 1919. DECIDED JANUARY 6, 1920.

Before WARRINGTON, KNAPPEN and DENISON, Circuit Judges.

Suit upon patents numbered 948,719, issued July 8, 1910, to L. Callahan, and 948,746, issued February 8, 1910, to A. L. Smith.

This case involves the tower apparatus now in common use for elevating and distributing wet ("mush") concrete upon the successive floors of high buildings, constructed in whole or in part from that material. The apparatus, as now used, involves two steps: first, elevating the material to a reservoir or hopper bin temporarily fixed at the de-

sired elevation in the tower; and, second, distributing it from that elevation, by gravity, through a conduit revolving at the point of connection with the hopper bin and having at least one swivelled elbow joint, whereby any desired point upon the selected horizontal plane can be reached for the gravity discharge of the material. Callahan and Smith each showed, in his drawing, the complete apparatus, but Callahan made no claim to the feature of the double swivelled discharge pipe. Callahan's application was filed January 21, 1909; Smith's on February 23rd of the same year. The Patent Office notified Callahan that his application seemed to conflict with another, and suggested to him some of the claims which Smith had made. Callahan adopted these claims, whereby an interference was declared. substance of the issue is shown by count one, which is given in the margin. (1) Upon this issue, Callahan conceded priority; judgment was rendered upon the concession; Callahan canceled these additional claims; and both patents Both patents, by assignments, licenses, etc., became the property of the Concrete Appliances Company and Insley, and this suit was brought by them in the court below based upon alleged infringement of both patents. The above quoted count 1 of the interference became claim one of the Smith patent, and is typical of those sued upon. Claim 5 of the Callahan patent is here quoted (2), and may

^{(1) &}quot;In a device for distributing concrete, means for elevating the concrete to a point above the work to be performed; a hopper adapted to receive the concrete so elevated; a primary distributing pipe revolubly mounted beneath the hopper; and a secondary distributing pipe revolubly mounted beneath the mouth of the first named ripe, substantially as described."

named ripe, substantially as described."

(2) "Claim 5. An apparatus for the purpose described comprising a tower, a conduit extending laterally therefrom, a suitably supported horizontally movable boom carrying the conduit, said boom being adjustably connected with the tower and adapted to be arranged at various points in the height thereof, means for raising plastic material to the point desired in the height of the conduit [tower] and means for receiving plastic material from the raising means and conducting the same to the conduit; the said receiving and conducting means being adjustable in the direction of the height of the tower."

be accepted as a statement of his invention said to be infringed. Claims 1, 2 and 13 are also declared upon.

DENISON, Circuit Judge:

It goes without saying that the Smith patent can get no advantage merely because it has been owned and commercially exploited along with the Callahan patent. Upon this record, Smith cannot claim to be the inventor of anything shown by Callahan's application,—except as the latter is modified by the later concession of priority. The Callahan patent is not a part of the prior art, in the sense in which that phrase is used with reference only to publications, but the Smith patent, both as to anticipation and as to the presence of invention, must be judged upon the basis of which the earlier Callahan application is a part (Lemley v. Dobson-Evans Co., 243 Fed. 391). It must, therefore, be assumed, as against Smith, that the advance of his claim 1 consisted merely in taking the concrete elevating and distributing apparatus of Callahan and substituting for Callahan's simple discharging conduit, revolving only at the point of attachment to the receiving hopper, the compound discharging conduit consisting of two or more sections revolubly connected with each other (3). We are not convinced that this advance involved any invention. Such a double swivelled conduit was a well known expedient for the gravity conveying of any material which it was desired to discharge at selected points in a lower horizontal plane. It is obvious,—at least when it is pointed out to us.—that with an inclined conduit swinging at its upper end, the lower end could be made to reach any desired point on the lower plane, either by changing the angle of inclination and

⁽³⁾ We sneak thus of Callahan's form, because of the necessary effect of the filing dates, the concession and the form of the issued claims.

modifying the length of the conduit, as by telescoping a section, or by adding a supplementary conduit revolubly connected with the lower end of the primary one. Neither form had been in use for concrete (before Callahan), but both forms were old for other purposes. The double swivelled form had been most highly developed in grain elevators for distributing the grain from the elevated receiving bin to the several openings on the floor below, which indicated spouts leading to still lower storage bins.

If the matter were to be considered in the broadest sense, there might be such distinctions between elevating and distributing grain and elevating and distributing concrete that transferring a device from one art to the other and making the necessary adaptation would involve invention; that need not be decided; but here, Smith begins at the point where the elevation of the concrete is finished; he has then merely the question of gravity distribution. finds that concrete has been distributed and grain has been distributed by a single unitary chute, swinging and turning at its upper end, and that grain has also been distributed by the double swivelled chute, thereby increasing the ability to select exactly the desired point for discharge. In the words which were used in Crown Co. v. Sterling Co., 217 Fed. 381, Callahan had already "bridged over whatever gap there was" between the art of concrete building and the art of gravity distribution, and the "door of opportunity was open" to all who wished to use in the former art an expedient well known in the latter. It seems to us quite clear that there is no invention in adding to the device of Callahan the well-known additional swivelled joint in the discharge conduit. It follows that those claims of the Smith patent sued upon are invalid, and the decree of the

court below, which dismissed the bill as to this patent, must so far be affirmed.

At the time these patentees appeared on the field concrete had already come into extensive use as a building material in connection with metallic re-enforcements, and it had been found that it was suitable for buildings of all shapes and of many stories in height. When mixed of the proper consistency, it was called mush concrete, and to handle this material and deliver it efficiently at the place of use in a large building operation was a considerable problem. Various methods had been employed, but the one most approved consisted in raising it by elevator to the floor or level where it was to be used and there dumping it into wheelbarrows, by which it was conveyed to the various desired points of use upon that level. It occurred to Callahan that he could construct a tower or skeleton elevator shaft which should originally extend, or which, by successive additions, should be made to extend, well above the highest story of the proposed building; that he could attach to this tower, and make vertically adjustable thereon, a receiving bin or hopper carrying a downwardly inclined and revolubly connected discharge chute, which could be swung about to reach various points on the next lower level to that where the receiving bin was fixed; that this receiving bin and its discharging apparatus could be temporarily fixed, as the building advanced, at positions on the tower suitably elevated above each successive story; that the mush concrete could be elevated inside the tower to these various fixed positions and there dumped into the receiving bin; and that, in this way, the mush concrete could be delivered in an approximately automatic way throughout the successive floors or levels of a building, no matter how high. Upon this record, this general thought was wholly novel. It has proved to be of great commercial value. It is common knowledge that, largely within the period since the patent issued, re-enforced concrete has largely superseded all other materials in the erection of large structures, and the record shows that eighty or ninety per cent of all the important construction work of this class in the country employs this Callahan method, and that all of the larger manufacturers of machinery and apparatus for this general purpose have taken licenses under the patent. It is not too much to say that the invention has played a large part in revolutionizing the building industry, and that it is not common for a patent in litigation to find itself supported by such a large measure of commercial merit and public acquiescence.

It is not contended that the patent is anticipated, in the strict sense of that term, but the defendant's position, approved by the court below, is that Callahan only put together old and familiar elements, and that his advance did not involve invention over what had gone before. To determine this question, we must know, first, the character of the relations between what was old and this new arrangement, and, second, whether his claims are properly characterized by reference to his real advance. To elevate material to a fixed and invariable height and to distribute it therefrom, by gravity, through a swinging, revolving chute, to different discharge spots upon a lower level, was common. As we have said, in considering the Smith patent, this was familiar in the class of grain elevators. The typical so-called grain elevator, or storage house, was a permanent structure, and grain was carried by various types of elevating apparatus to the permanent top floor or level.

From the bottom of the bin there situated, depended a swinging chute which could be moved about so as to discharge, upon the floor below, into any storage oin opening from that level. These grain elevators, like others of similar type shown by the record, entirely lack the only substantial novelty claimed for Callahan. They did not have a temporary receiving bin or hopper with a connected discharge chute vertically adjustable in an elevator tower, adapted to distribute the material upon successive levels. If invention lies in this thought and its practical application, the grain elevators are not important.

Next, we are cited to several examples of unloading apparatus for vessels, of which the English patent to Baillie, No. 10,380, of 1888, is as relevant as any. In this device, which was for transferring coal from a barge to the ship alongside, there was a receiving bin or hopper located in an elevated frame-work or staging on the barge, and from which a depending chute carried the material away by gravity to the proper bunker in the ship. The coal contents of the barge were raised to this point by an endless chain of buckets over an inclined mast or support pivoted to the vertical frame at its upper end. Evidently, as the contents of the hold of the vessel became lowered, this mast must be extended further down, or further to one side, and this could be done either by an extension of the lower end or by lowering the upper pivoted point. The patent shows both methods of adjustment. The bin and pivot could be lowered upon this supporting stage a short distance,-not more than the height of the bin. The point of final delivery was not changed. Such vertical adjustability as there was in the bin was incidental to raising and lowering the whole "tower" to accommodate it to the point where elevation began. We do not find here any substantial disclosure of the real novelty of Callahan's invention, as above stated.

This leaves for consideration only the patent to Theiss, et al, No. 866,166, of September 17, 1907. It is not to be doubted that this is suggestive of the idea and the apparatus of Callahan; whether it is more than a mere suggestion is the question. Theiss' apparatus, like Baillie's, was intended for unloading coal from a barge and loading it into the hold of a ship. It consisted essentially of a tower-shaped structure permanently erected upon the deck of a barge or scow. It was intended to reach a distance substantially higher than the coal receiving hatchways of the particular ship which might be selected to be served; there was never occasion to make it any higher. This tower carried an elevator car or skip which was loaded with coal when it was at the bottom of the tower, and then was elevated as far as necessary to be dumped into a receiving bin, which bin was capable of vertical adjustment on the tower. This receiving bin in turn dumped into a chute which, at its lower end, discharged through the hatchway of the vessel to be loaded. This chute was not revolubly connected with the bin or tower. It could not be moved laterally. It was carried, by the tower, in ways or guides which gave the chute its inclination and permitted it to slide therein longitudinally. There was a permitted adjustment of the guide by which the angle of inclination could be changed, but this was done by releasing and readjusting and refastening the guide-ways, and could not be done as a part of the operation of the device while in use. The adjustment and fixing of the chute, in order to discharge into a desired hatchway, was a complicated matter. First, the carrying scow must be so positioned and fastened with reference to the ship

that the tower was exactly opposite the hatchway. Second, the receiving bin and the chute must be adjusted vertically in the tower at such a position that the chute, in its carrying guides, would be pointed at the hatchway. Third, the chute must be slid downward and outward in the direction at which it was pointed until its lower end entered the hatchway. If, then, it was next desired to reach another hatchway on the same transverse line, the vertical adjustment of the bin and the chute carrier, and the aiming of the chute at the new hatchway and its longitudinal extension into contact therewith, must be repeated. If it were desired to reach hatchways further forward or aft, the scow and its entire apparatus must be released and floated along side the ship to its new position. In the broadest sense, this patent shows a plan of elevating material to an adjustable vertical height and from there distributing it by gravity to selected positions upon a lower level; but it shows this idea in a very rudimentary form; it would be practically useless, for the purposes now involved.

In details of construction and of claim reading, there is ample differentiation. Claim 5 of Callahan, above quoted, will not read on Theiss. A comparison of the Theiss apparatus with this claim shows: (a) That the Theiss apparatus is not "for the purpose described", in any restricted sense of that phrase. (b) That Theiss has a relatively short supporting framework, rather than a relatively high and distinctive tower. (c) That while Theiss has "a conduit", it does not "extend laterally therefrom", excepting in the most general sense. (d) That Theiss has no "suitably supported horizontally movable boom carrying the conduit", nor anything which approximates such a boom. (e) That since he has no boom at all, of course, he has no boom

"adjustably connected with the tower and adapted to be arranged at the various points of the height thereof"—but it must be said that Theiss' conduit itself has this vertically adjustable connection with the tower. (f) The remaining elements of the claim are literally met well enough by Theiss, save for the distinction as to their use with plastic material.

The question presented by Theiss seems not to be one merely of double use, because the structural differences are too great; but if the physical resemblance were much closer. the defense of double use would be far from satisfactory. (See Ansonia Co. v. Electrical Co., 144 U. S. 11, 18; Potts v. Creager, 155 U.S. 597, 606-8; Hobbs v. Beach, 180 U.S., 383, 390; Gold v. Newton-C. C. A. 2-254 Fed., 824, 827.) Certainly, the art of loading coal into a ship for fuel is not the same art as that of distributing wet concrete to a building structure; nor is the analogy very close. It is not at all certain, even if probable, that an experienced building engineer, considering methods of handling wet concrete for a skyscraper, would call to mind a coal-handling apparatus on a harbor scow. On the other hand, it impresses us as a bold and original thought that this material could be handled in this way. Distributing mush concrete through gravity chutes by one apparatus throughout the whole course of building obviously involved difficulties; it had never been handled by gravity chutes at all excepting under simple conditions where these difficulties did not exist,-and then, perhaps, had been done only on paper; on one side was the danger that it would adhere to the chutes and set and choke up the pipes at least at the valves and gates; on the other side, the risk that the elements would disintegrate and the water and the cement and the broken stone fall in separate

strata. Callahan's conception, that this material could be thus treated so as to deliver it from the ground all about the successive several floors, of a high building and with practically no manual labor, except that involved in the story by story adjustment of the apparatus, involved, we think, inventive thought of a high order, when accompanied as it was by the devising of suitable apparatus to carry out the thought, which apparatus substantially differed from anything which had ever been constructed for any purpose,although every element was old. It is true, in a sense, that the Callahan device is produced upon the basis of Thiess' structure by substituting for the longitudinally sliding and extensible delivery chute of Theiss, the revolubly mounted chute of the grain elevators; but this is not the whole truth. Callahan built up his tower to a height never thought of by Theiss, and which Theiss could not have accomplished without capsizing his barge; and Callahan supplied a chute-supporting boom attached to the receiving hopper and vertically adjustable with it, a feature which the grain elevators did not have and could not have used. He thereby laid the basis for adapting the structure to a use fairly distinct from that of either a coal elevator or a grain elevator.

As upon every such question, there is no authoritative decision which compels one or the other conclusion; the doubtful inference is rather one of fact; but we select and refer to a few instances where invention has been found,—by the Supreme Court or by this court,—and the facts of which may well be thought to present no stronger inferences in its favor than do those of the instant case (Loom Co. v. Higgins, 105 U. S., 581, 590; Hobbs v. Beach, 180 U. S., 383, 393; Expanded Co. v. Bradford, 214 U. S., 366, 381; National Co. v. Aiken, 163 Fed., 254, 259; Warren v.

Owosso, 166 Fed., 309; Morgan Co. v. Alliance Co., 176 Fed., 100, 109. Ferro-Concrete Co. v. Concrete Co., 206 Fed. 666; International Co. v. Sievert, 213 Fed., 255).

The test of the presence of invention in a new assembly of old elements is sometimes said to be whether a new result is accomplished. This is often not a helpful rule, because its application involves definition of the phrase "new result"; and this opens the original difficulty. Within a narrow definition, every new combination of old elements gets a new result, but this is not the sense in which the phrase is rightly used as indicative of invention. The recent opinion of this court in Huebner Co. v. Matthews Co., 253 Fed., 435. illustrates this situation. The ultimate practical result at which the patentee and his predecessors aimed was to carry packages by gravity upon a runway from one place to another. The patentee was the first to accomplish this with such a degree of efficiency as to make the device commercially popular, but the same result, except in efficiency degree, had several times been reached before, and by apparatus so similar as to be superficially indistinguishable. The patentee had simply added the well-known and common mechanical refinements and expedients already used by others even in the same art, e. g., he used roller bearings instead of ordinary journal boxes, and we declined to regard this as a new result. We have no intention to depart from that line of our recent decisions (4) of which this one is typical; such refinements are not inventions. On the other hand, we recall no instance of combinations of old elements which has been held to produce "a new result" in a patentable sense and which better deserves that commendation than does Callahan's. The quasi-automatic elevation and

⁽⁴⁾ E. G.—Berger Co. v. Trussed Co., 257 Fed. 741; Edwards v. Dayton Co., 257 Fed. 980; Van Dorn Co. v. Mathis Co., 260 Fed. 400.

distribution of wet concrete under the varying conditions of progressive building and by a single apparatus was an entire novelty. No one had tried to do it; apparently, no one had thought of it; it was useful in a very high degree; and when we find a new result in this complete and extreme sense accomplished by a confessedly new combination,—though of known means,—we think both the purpose of the patent law and the rightful application of the decisions thereunder require that it should be awarded the merit of invention.

We have stated our conclusion that the device of the patent is not an aggregation in the sense that it represents such a mere assembling of old elements as might have been made by the exercise of only ordinary skill. It is at least equally clear that the device is not an aggregation in the more technical sense of the word, but is rather a true combination. It is true that the use of the apparatus involves successive steps, and is at each of its stages under direct or indirect manual control; but, in a fair sense the entire operation of elevating and distributing concrete is a unitary thing. From the time it starts on its journey from the ground to the time it is deposited in the forms, its progress might well be automatic. There is clear distinction between this performance and that of the associated washing and wringing machines, discussed by the Supreme Court in Grinnel Co. v. Johnson Co., 247 U. S., 426. In the latter case, both the judgment and the hand of the operator were involved, in submitting to the second operation the material which had finished the first; the juxtaposition of the two machines was a mere matter of convenience; in the present case, the operator can, at the most, only interfere to prevent the otherwise normal completion of second part of what is intended to be the unitary work; and even then his interference will only temporarily stay the normal action. We collected and commented on the decisions of the Supreme Court and other courts on this subject, in *Gas Co. v. United Co.*, 228 Fed., 684. Callahan's patent should not be condemned as an aggregation.

We do not overlook the fact that some, and perhaps a considerable portion, of the practical and commercial success has been due to the use of the feature covered by the Smith patent; but this does not detract from the patentable and inventive merit of Callahan's idea. An oscillating or swinging chute, even without Smith's secondary swivel, would make the primary distribution of the concrete throughout the floor or level, leaving the secondary and more accurate distribution to be accomplished by further means. We have held that the particular means adopted by Smith did not involve invention, and we can hardly say that much of the credit due to public use should be taken away from Callahan because he had not himself adopted an improvement and refinement which, however important to commercial success, was within the grasp of the men ordinarily skilled in the art.

We have considered claim 5. Claims 1, 2 and 13, also in suit, use more general terms and are superficially somewhat broader, but we think in connection with the specification they necessarily intend that the means for receiving the concrete from the raising means and taking it to the conduit are vertically adjustable in the tower. This may fairly be implied from the requirement that the material is to be raised to a "suitable point" in the tower. It is then seen that all these claims involve what we have thought Callahan's meritorious invention, resting upon the succes-

sive story by story operation of the device. With this interpretation, they are not very different from claim 5, but should be treated as other expressions of the same thought in terms nominally of somewhat broader equivalency. These claims, also, should be considered valid.

Infringement is not denied.

The decree below, as entered, must be set aside and the record remanded for a new decree modified in accordance with this opinion.

No. 3241.

IN THE

UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SIXTH CIRCUIT.

CONCRETE APPLIANCES COMPANY, et al..

Plaintiffs and Appellants,

DIETRICH MEINKEN, et al.,

Defendants and Appellees.

ON REHEARING PETITION

March 2, 1920.

DENISON, Circuit Judge: The application for rehearing brings to our attention a matter not mentioned in the opinion. We selected claim 5 as the one most suitable for study, because it expressly incorporated those features in which we thought patentable novelty was to be found. One of these features was the horizontally movable boom carrying the conduit, and "being adjustably connected with the tower and adapted to be arranged at various positions in the height thereof." We assumed that this referred to a vertical adjustment of the boom in the tower. The assumption is now challenged, because it is said that the adjustable connection between the boom and the tower was that mechan-

ism which provided for a horizontal adjustment of the upper end of the boom on a horizontal track (which defendant has not used), and that the provision for vertical change of the boom in the tower is not adjustability, but rather refers to a dissembling of the parts in one location and reassembling them in another. It is true that the specification refers to a horizontal adjustability, but we do not think that it is this capacity to which claim 5 refers—at any rate, this inference is not clear enough to justify limiting the claim to a comparatively unimportant detail. Such an inference is contradicted both by the fact that this horizontal adjustability of the boom on the tower is made the special characteristic of a group of claims not in suit, and by the fact that the thought is stated in the claim in immediate connection with the reference to "various points in the height" of the tower, and after one reference has been made to the horizontal motion of the boom and the reference to that function apparently finished, while the draftsman turned to the thought of vertical change. It is true, also, that in the form of the invention shown in the drawings and specifically described, the vertical change was to be made by taking out bolts, removing the horizontal platform, raising it and bolting it again to a new position, and that this is not adjustability in the most precise definition. However, it is well within the sense in which the word is very often used, and we must define it as the patentee intended. For these reasons we adhere to the interpretation of the claim in this respect which the opinion assumed.

It is also true enough that Callahan specifically contemplated building his tower up section by section, as the building progressed; but this was a matter of preference. His drawing shows the completed tower, permitting operation

anywhere along its height, and observation of his plan of erection does not change our conception of the real disclosure.

In other respects, further review of the case leaves our stated conclusions unchanged, and the application for rehearing will be disallowed.

We note that the reference to a mixer, found in line 35, on page 8, is erroneous. The phrase should read "deliver it from the ground all about, etc." In line 31, p. 10, "mixer" should be "ground." In the last line of page 7, "adjustable" should be "adjustably connected." The clerk will make the corrections in the opinion on file.

APPENDIX B.

IN THE

UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT.

March Term, 1923.

CONCRETE APPLIANCES COMPANY AND WILLIAM H. INSLEY,

Plaintiffs-Appellant,

JOHN E. GOMERY, JOHN C. SHWARTZ, MICHAEL J. O'MEARA AND CON-CRETE CONSTRUCTION COMPANY, Defendants-Appellants. No. 2982

Appeal from the District Court of the United States for the Eastern District of Pennsylvania.

Before BUFFINGTON, WOOLEY and DAVIS, Circuit Judges. BUFFINGTON, Circuit Judge.

In principle, this case concerns the use of gravity in conveying mobile substances from an elevated common central point to various working points; in application, to the distribution of "wet" or "mush" concrete.

Referring to the above general principle of conveying mobile matter by gravity, we have the age-worn practice of lifting water by power to a reservoir and by gravity distributing it through conduits to a fixed point or by hose to diverse points. In other words, the problem of lifting it to a gravity-sufficient height; of there accumulating it in storage; from thence conveying it by conduit to a determined place or by hose to an optional point of use. Naturally such general practice was early applied to the movement of such a mobile matter as grain when its volume became large and the word "elevator" became a synonym for the raising, storage and distribution of grain, into individual cars, the ends of the same car, into ships, and indeed into separate hatches.

As an example of the common practice the proof is that prior to 1905 and since then, practically all elevators delivering grain to ships have been equipped with pipes, extending downwardly from the side of the elevator and supported by horizontally movable booms for directing the outlet of the pipes to any desired part of the boat, within range of the apparatus. But not only was such movable conduit's discharge pipe handled by the boom on the elevator, but where the change of the tide or the lower level of the ship, caused by loading, made it desirable, a second or supplemental hopper and an additional spout were suspended from and handled by a boom and tackle on the ship itself. This supplemental hopper received the discharge from the elevator spout, and discharged it into the vessel as change of tide or the settling of the vessel necessitated. The proofs further show that where two ships were lying side by side and it was desired to spout the grain to an outlying, or "secondoff" one, it was done by such elevator appliances in spite of the long stretch required. It was also a common practice

to provide the spout with a telescopic extension end by which further horizontal reach was effected, due to the varying positions of the ship. Moreover, it will be noted that on such apparatus the function of the boom was not only to raise, lower and swing the spout to reach the hatches of the ship under different conditions of load and tide, but also to draw up and house the spout so as not to interfere with the navigation or movement of the vessel.

The same general type of grain elevator appliance was used for loading cars. The proof is that "the hopper ends of the spouts were constructed with an enlargement, forming hoppers, and grain spouts were connected to them in All types of movable and fixed the elevators. spouts were used in grain elevators at that time, of the movable type, those in the grain elevators were either portable or so constructed that they revolved around a fixed point. * * * Outside of the buildings they had spouts for shipping grain to cars, which were generally fixed in position with a telescope and either with one opening or two, so arranged that grain could be thrown into either end of the car." Without further statement, it will be seen that the steps of lifting grain to get gravity; of storing to get quantity; or chuting to get delivery; and of boom swing and trough shift to vary locality of delivery; and also of duplication of these shore appliances by supplemental boom and conduit on shipboard; had all been advanced to a high state of efficiency and delivery point variation in elevator grain practice.

The same may be said of coal practice, the proofs showing the contemporaneous use of "coal chutes in connection with coal elevators in stock piles, where the coal was elevated and spouted out through the side of the building into a stock pile and into bins. The spout would be supported in a similar manner to the spouts heretofore referred to as shipping spouts in connection with grain elevators," this, "that the spout could swing in any direction and was suspended from a swinging boom."

Later, when concrete docks, piers and the like came to be built, it was quite natural for contractors to use in building them the apparatus used for grain chuting and to handle and chute concrete in the same way. And such, the proofs show, was the case as will be seen by reference to but one or two operations. In November, 1906, a concrete foundation for an intake and pumping station was built by the Great Lakes Dredge and Dock Company at Gary, Indiana. Here a car was used on which was a mixer from which the concrete was discharged into a hopper or chamber and from which chutes suspended from a boom located on the car, chuted the mixed concrete down to the coffer dam where it flowed either into piles or was poured in place, the dam being some forty feet in width and of great length. chutes in the apparatus would be moved up, down and sideways. The apparatus was used for several months and was constructed by a man who had never seen concrete so handled, but had seen it used in grain elevators. In addition to the testimony of the builder of this apparatus, another witness testified as follows:

"The first apparatus we used was a concrete mixer set on a flat car, and the concrete was spouted from the mixer into the bottom of the excavation. We called it chutes then. There was an improvement made on this apparatus to distribute the concrete from one location to another within a radius controlled by a boom holding the chutes or spouts. The ends of the spouts were—the location of the

ends of the spouts were placed by swinging the boom that carried the concrete spouts."

The same man the next year used similar apparatus in building a concrete dock at the same place. In this case the apparatus was placed on a scow, a mast being placed in front of a mixer, a boom placed on such mast and a chute suspended by tackle therefrom. As to its mode of operation the constructor testified:

"It is dumped out of the mixer into a bucket, and conveyed up with a cable in a bucket, and dumped into a hopper which is fastened on the tower; and we have one 50 foot section of 12-inch pipe carried by two booms and fastened on the bottom of the hopper, and as occasion requires placing concrete in forms, we have 8-foot sections or 10-foot sections to take on or off.

Q. How could you change the point of delivery

of the lower end of the pipe?

A. By adding on a section 10 feet long, or taking it off, as occasion required.

Q. Was there any other way to change the point of delivery?

A. By swinging booms and swinging pipe.

Q. Was this apparatus successful?

A. Very successful."

Another witness described it thus:

"This apparatus is a concrete equipment built on a scow, consisting of a concrete mixer at the proper elevation so that concrete could be spouted into the concrete dock; and above the mixer was constructed two hoppers, one for stone and one for sand, this being at one end and the other end of the scow being the cement shed. A boom was placed to support the chute, for the porpose of raising the spout so that the concrete equipment could be moved—I meant to state for the purpose of spouting the concrete in the forms for the dock, and also to raise the spout when moving the equipment ahead."

He further testified that the number of chute sections used was determined by the distance from the mixer to the concrete forms and that as much as five or six such sections were used on this work and that the dock itself was five thousand feet long.

There is proof of the use at San Francisco Harbor in 1904-5-6 of substantially similar concrete chuting apparatus placed on a scow. It clearly shows the use of chutes moved to different positions by a boom. A witness thus describing the boom's action, said:

"Well, the boom is the bottom end of it, and sets in a hinged socket, I would call it, and the outer end has a sheave in the end of it, the cable runs from the donkey engine to the sheave in the outer end, which is used to handle the pipe that carries the cement to the cylinders. All the use of this boom is to handle the pipe that carries the cement."

Moreover, a study of the proofs satisfy us that from the time concrete came into use there had been a struggle between the architects and designers, who, as a class, favored the use of dry concrete which would not flow, and the contractors, who, for construction convenience favored wet or mush concrete, which would flow and therefore allow the use of distribution chutes, and that as soon as the use of wet concrete became general, the art used the wet concrete chutes, which it could not use for the dry. In that regard, the proof was that "The more reinforced concrete came into use, the more contractors used wet concrete; and I should say that from 1908 on on very much the greater portion of

reconstruction work was done in concrete than before; hence, also, the more wet concrete was used since that time." In these evolutionary stages of the concrete art, the proof is that the builders of grain elevators took a leading part in the use and distribution of wet or mush concrete. In that regard, the proof is:

"Architects in general prior to the year 1904-05 demanded that concrete be mixed what is known as very dry; and to such a consistency that it required considerable tamping to make the water flow on top: but grain elevator designers and contractors have never been governed by architects' rules and guidance or specifications, as the elevator designer generally built the elevator that he designed, or that some other company designed; therefore they were a sort of law to themselves, and, in my opinion, were the first designing engineers and contractors to use what is known in the trade as 'wet' or 'sloppy' concrete. In my opinion this was brought about by the use of what is called 'slip' or 'movable' forms. By the use of such form, which is usually about 4 feet high, the wall, column, or girders, is formed by filling the movable form with sloppy concrete and reinforcing, and at the same time, constantly raising the form by a series of jack screws supported on steel bars, which are imbedded in the concrete. The jack screws are fastened into these bars, and by turning down the jack screws the form is forced up; this making the structure one monolithic mass; but to do this the concrete had to be run into the form in a liquid state, and such a liquid state that it did not require tamping, but only spading.

From the mixer the concrete was spouted into a hoist hopper. This hoist hopped was hoisted by a power to the top of the building as it was in course of construction. When reaching the top a gate, which was provided on the side of the first hopper, was opened and the concrete material allowed to dis-

charge through a spout into another similar hopper, but stationary. This last named hopper was usually located about from 15 to 20 feet away from the side of the hoist tower, and in the elevator work was supported on the movable form. From this hopper the concrete was drawn into wheelbarrows or concrete carts, and with these distributed into the various walls, columns and floors."

An engineering witness described the evolution and growing use of wet concrete in this way:

"About 1902, there was considerable agitation among engineers of all kinds dealing with foundations, as to wet or dry concrete. The engineering fraternity was divided into two camps about that time, one advocating a concrete mixed quite dry and thoroughly tamped, and the other advocating using a concrete mixed quite wet or mixed to a consistency which would enable it to flow easily, and which did not require tamping after being placed. This agitation to my knowledge, extended over a period of about five years, the wet fellows arguing that from a constructional standpoint the concrete was easier and more cheaply placed and made a more dense bixture. About this time, also, 1902, I joined the Western Society of Engineers and attended the meetings quite frequently, and heard papers read by different engineers on both sides of the question. The use of reinforcing steel in concrete became more customary about 1902, and a former professor of civil engineering of the University of Illinois, Prof. Pence, read a paper before the Western Society of Engineers, describing tests he had made as to the expansion coefficient of concrete, with relation to the expansion of steels.

These experiments brought out the fact that it was possible to use steel and concrete together, so far as the expension coefficient was concerned, and following this with the increased use of reinforcing

steel in concrete it was almost imperative that a wet concrete be used in order to have it properly placed around reinforcing steel. Really, according to my opinion, the introduction of reinforcing steel made it imperative that concrete more of a consistency of liquid be used in order to build the structures then being designed, and this fact made it imperative that in handling this liquid concrete the chute or trough come into play."

Sensing the gradual increased use of the concrete art through these experimental years, it would seem from the proofs that the grain elevator contractors led the way in the broader use of mobile concrete and that as the engineer determined the co-efficient of relative expansion of steel and concrete was such as to permit their joint use in reinforced building construction generally, the consequent and indeed the insistent call for the use of wet or fluid concrete became more imperative, because such concrete could be better placed around reinforcing steel and that this use of fluid concrete naturally brought with it the employment of fluid carrying troughs.

This insistent call for wet concrete was evidenced by the building requirements made by the City of San Francisco after the earthquake and fire catastrophe. In that regard an experienced engineer who went there from the East to study building conditions testified:

"There are so many different types of buildings in old San Francisco, but, roughly, the most decided change, I believe, was the general adoption of more concrete in the construction of the new buildings. As a rule concrete was substituted for former brick and tile construction wherever possible. Shortly after the earthquake two types of buildings were officially recognized by San Francisco, and generally

through California, i. e., class A type, which consisted of a steel frame fireproofed by concrete; and class B building, which consisted almost entirely of reinforced concrete. This necessitated the more general use of wetter concrete than had been practiced heretofore, as walls and floors and fireproofing were of the minimum thickness allowed by safety, and could not be constructed with the older methods of dry concrete."

It is no reflection on the patent office of the United States, but simply an instance of how often the theoretical expert of an art is in his office oblivious to the atmosphere of practical accomplishment in the field of achievement, when we note that, unconscious of this wide, growing and much discussed use of wet cement, the patent office, on November 2, 1909, granted patent No. 939,072 to A. D. Ney, which was based on the specification statement by him made July 10, 1909, that "In the making of concrete, it has hitherto been the general practice in mixing the materials as stiff as possible, using only sufficient water to cause the adherence of the material together, and thereafter tamping the material to cause the mass to be as compact as possible in its relatively dry condition. In the operation of making the product of the present invention, a radically different method is followed in that an abundance of water is employed in order not only to permit gravity to bring the mass to a solid, compact condition and thereby dispense with the ramming operation, but also to provide sufficient water for the purpose of crystallization. The process of forming the present process is essentially a wet process, and distinguished from the relatively dry process employed in making concrete."

In the actual state of the working art which the proofs quoted above show in fact existed, and with the measure of the art, as evidenced by the Nay patent above quoted, then held by the patent office, Callahan and a number of other alleged inventors, who thereafter were thrown into interference with each other, applied for patents which had in view the spouting or chuting of wet concrete. Without attempting to settle the questions of priority between these claimants, we may say that the period which embraces their several dates is confined to a comparatively narrow compass and to our mind they all serve to show that at or about the same time the natural mechanical evolution of the concrete art and the possibility of the use of wet concrete mechanically, but instinctively, led all these men to adopt the same general types of mechanical appliances for the chuting of wet concrete. It is a situation to which we feel we may re-apply what was said by this court in Elliott vs. Youngstown, 181 Fed. Rp. 349: "Nor is it necessary to dwell upon the suggestion that applications were made for blue print machines with an automatic cut-off by four different inventors about the same time. Fullman and Herman among the rest. The fact that so many persons caught the idea goes rather to prove that it was simple and obvious, and not that it required inventive genius to conceive. It is not like the case where the art is waiting for the device, and inventors striving unsuccessfully to produce it, under which circumstances invention may well be held to appear."

Restricting ourselves therefore to the single one of these group inventors, we note that on January 21, 1909, Lee Callahan applied for, and on February 8, 1910, was granted patent No. 948,719, here in suit, for a material transferring apparatus. As stated in the specification, Callahan's alleged

invention had "for its general object to provide an apparatus calculated to be used to advantage in transferring concrete or other plastic material from a suitable source of supply to points desired on a building that is being built." It also stated a second general purpose was "to provide an apparatus of the kind stated adapted more especially for use when a building is to embody reinforced concrete." And likewise a third, viz: "for transferring other material from the ground to the points desired on a building in course of construction." On his apparatus, Callahan was allowed the claims here in question, viz: 1, 2, 5 and 13, of which the first reads:

"An apparatus for the purpose described, comprising a tower, a suitably supported horizontally movable boom connected therewith, a conduit carried by the boom, means for raising plastic material to a suitable point in the height of the tower, and means for receiving plastic material from said raising means and conducting the same to said conduit."

This is fairly illustrative of the elements of the other three claims. The elements of the quoted claim are first "a tower"; second, "a suitably supported horizontally movable boom connected therewith"; third, "a conduit carried by the boom"; fourth, "means for raising plastic material to a suitable point in the height of the tower," and, fifth, "means for receiving plastic material from said raising means and conducting the same to said conduit."

Comparison of Callahan's apparatus with the prior art shows that it really constituted no advance over that art, but on the contrary, rather a step backward. For example, he either had no knowledge of the use of the open trough or chute, or if he had he made no mention of it or suggestion of its possible use, confining his specification and limiting his claims to "a conduit" or closed pipe. And the proof is that this closed conduit of his claim soon proved worthless on account of clogging and had to be supplanted by the open chute of the earlier art. There was of course nothing new in his element of his elevating tower. That was as old as the elevator art. Making it extensible from story to story involved no more invention than if he had built his tower complete at the start and allowed his building to build up to tower height instead of the tower to the building height. His means to convey the material up the tower was only another name for an elevator cage or container of suitable form and capacity. A receptacle for storage at the top was a common practice in grain and coal devices and a boom to carry a chute or trough was common in the grain and concrete arts. In fact, we are unable to find any element of novelty either in the separate elements Callahan used or in the unification of such elements in the apparatus he suggested. Had the actual state of the prior art been shown to the patent authorities we cannot feel they would have granted this patent and while we feel embarrassed to find ourselves at variance with the Circuit Court of Appeals of the Sixth Circuit, which in the case of Concrete Appliances Co., et al. v. Meinken et al., 262 Fed. 958, found this patent valid, we feel assured that the meager record before that court wholly failed to disclose the now uncontradicted proofs on which we base our conclusions.

In the advance in the concrete building art with the extension towers to great heights and chutes to great distances, the very magnitude and scale of the work are such as to impress the onlooker and there is danger of one's be-

ing misled by their very magnitude into the belief that they must involve invention, but when their principle is sensed it will be found the known principle and practice which marked the art long before this patent, have simply enlarged as construction enlarged its operation. That growth is in this case due to the appreciation of wet concrete and convinced as we are that in roads, piers, docks, bridges and buildings generally, concrete is the growing material of the future, we believe its advance should be in no way embarrassed by this patent by which the art is now sought to be blanketed. The court below held the patent was not infringed; we go a step further and hold Callahan, so far as the claims here involved are concerned, had no such patent claims to infringe. The cause will therefore be remanded to the court below to modify its decree by adjudging the claims in controversy invalid and as thus modified the decree is affirmed.

APPENDIX C.

IN THE

UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT.

March Term, 1923.

CONCRETE APPLIANCES COMPANY,

Appellant,

VS.

J. E. GOMERY, ET AL.,

Appellees.

No. 2982

Appeal from the District Court of the United States, for the Eastern District of Pennsylvania.

This cause came on to be heard on the transcript of record from the District Court of the United States, for the Eastern District of Pennsylvania, and was argued by counsel.

On consideration whereof, it is now here ordered, adjudged and decreed by this court, that the decree of the said District Court in this cause be, and the same is hereby mod-

ified so as to adjudge the claims in controversy invalid, but otherwise affirmed, with costs.

Philadelphia. July 24, 1923.

(sgd.) VICTOR B. WOOLLEY,

Circuit Judge.

On an application with respect to costs seasonably made within the term of the decree, the above order is vacated.

(sgd.) VICTOR B. WOOLLEY,

Circuit Judge.

Received and Filed Jan. 23, 1924. SAUNDERS LEWIS, JR., Clerk.

APPENDIX D.

IN THE

UNITED STATES CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT.

March Term, 1923.

No. 2982.

CONCRETE APPLIANCES COMPANY AND WILLIAM H. INSLEY,
Appellants,

VS.

JOHN E. GOMERY, JOHN C. SCHWARTZ, MICHAEL J. O'MEARA, AND CONCRETE CONSTRUCTION COMPANY,

Appellees.

Having heard and considered the application of the appellants that the costs in this cause, taxable against them, be limited to such as were actually paid by the defendant users of the alleged invention of the patent; and being of opinion that the manufacturer which supplied the defendants with the alleged infringing appliances and openly de-

frayed in part the expenses of this litigation are to that extent privy to the action.

IT IS on this thirty-first day of January, 1924,

ORDERED, adjudged and decreed that this cause be remanded to the District Court of the United States for the Eastern District of Pennsylvania, that the said court modify its decree by adjudging the claims in controversy invalid, and as thus modified the decree is affirmed, with costs to the appellees covering their proper disbursements as users and the proper disbursements of the manufacturers supplying them with the alleged infringing appliances.

VICTOR B. WOOLLEY, Circuit Judge.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1923.

CONCRETE APPLIANCES COMPANY AND WILLIAM H. INSLEY, Petitioners

VS.

JOHN E. GOMERY, JOHN C. SCHWARTZ, MICHAEL J. O'MEARA, AND CONCRETE CONSTRUCTION COMPANY, Respondents.

No. —

NOTICE OF SUBMISSION.

To Wm. Steell Jackson, Esq.,

Counsel for Respondents.

Please take notice that on Monday, March 17, 1924, we shall submit the accompanying petition for writ of certiorari to the Supreme Court of the United States, at the Capitol, Washington, D. C., at the opening of Court on that day, or as soon thereafter as counsel can be heard.

ARTHUR M. HOOD,

STEPHEN J. COX, Counsel for Petitioners.

Service of the above Notice of Submission, and receipt of five copies of the accompanying Petition for Writ of Certiorari and Brief in support thereof is acknowledged this 3rd day of March, 1924.

Counsel for Respondents.